

REMARKS

Claims 2, 4, 6, 12, 16 and 19-73 are pending. Claims 2, 4, 19, 41, 46, 47, 51, 55, and 56 have been amended without prejudice and without acquiescence. New claims 57-72 have been added. Support for these claims can be found throughout the specification and the claims, more specifically, support for common application area can be found on page 2, lines 25-27, page 13, lines 1-2, and Figure 4a-4d, see item 1 Support for the addition of “sequentially” can be found in the specification on page 8, lines 27-34. Applicants retain the right to file a continuation application on any canceled or amended material. Applicants assert that no new matter has been added.

The issues outstanding in this application are as follows:

- Claims 2, 20, 21, 32, 36, and 42 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ronaghi et al. (Anal. Biochemistry, 1996).
- Claims 2, 4, 6, 12, 16, 19-31, 33, 34, 37-40 and 41-56 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ronaghi et al., in view of Mian et al., (US 6,319,469).

Applicants respectfully traverse the outstanding rejections, and Applicants respectfully request reconsideration and withdrawal thereof in light of the amendments and remarks contained herein.

I. 35 U.S.C. § 102(b)

Claims 2, 20, 21, 32, 36, and 42 are rejected under 35 U.S.C. § 102(b) as being anticipated by Ronaghi et al. (Anal. Biochemistry, 1996). The Action states that Ronaghi et al. teaches the methods of using a microfluidic device to determine a nucleotide base in a nucleic acid sample. Applicants respectfully traverse.

In order to advance prosecution of the present application, Applicants have amended independent claim 2 to indicate that there are two or more reaction areas which is not referenced in Ronaghi et al. Nowhere in Ronaghi et al. that the Applicants can identify, is there any suggestion of a microfluidic device having two or more reaction areas in a microchannel structure of a microfluidic device. If the Examiner continues to maintain the above references as the basis for this rejection, the Examiner is requested to make of record the passage relied upon, or state for the record that no such teaching can be found. *See, In re Gartside*, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000).

In view of this amendment, independent claim 2 is not anticipated and thus dependent claims 20, 21, 32, 36, and 42 are also not anticipated. Thus, Applicants respectfully request withdrawal of the rejection.

II. 35 U.S.C. § 103(a)

Claims 2, 4, 6, 12, 16, 19-31, 33, 34, 37-40 and 41-56 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ronaghi et al. in view of Mian et al., (US 6,319,469). The Action states that Ronaghi et al. teaches a method of identifying a sequence of a portion of DNA, but does not teach identifying a sequence of a portion of DNA using a microfluidic device. The Action further states that Mian et al. teaches the use of a microfluidic device for the method of Ronaghi et al. Applicants respectfully traverse.

During the interview of February 16, 2005, the Applicants indicated that the sequencing methods of Mian et al. were not similar to the ones of Ronaghi et al., in fact the sequencing methods taught by Mian et al. are Sanger sequencing as indicated in Example 7, col. 48, line 65. Thus, in order to advance the prosecution of the present invention, Applicants have amended independent claims 2, 4, 19, 41, 46, 47, 51, 55, 56 without prejudice and without acquiescence to indicate that the claimed steps are performed in

sequential order. Nowhere in Mian et al. that the Applicants can identify, is there any suggestion of any other sequencing method other than the Sanger sequencing method. Thus, the Sanger sequencing method as described by Mian et al. can not be performed according the claimed invention. If the Examiner continues to maintain the above references as the basis for this rejection, the Examiner is requested to make of record the passage relied upon, or state for the record that no such teaching can be found. *See, In re Gartside*, 203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000).

In view of this amendment, Applicants assert that Mian et al. is no longer applicable as a reference. With the removal of Mian et al. as a prior art reference, the remaining reference is Ronaghi et al., which does not teach or suggest all the limitations of independent claim 2, 4, 19, 41, 46, 47, 51, 55, 56.

Since neither Ronaghi et al. or Mian et al., either separately or in combination, teach or suggest all the limitations of independent claim 2, 4, 19, 41, 46, 47, 51, 55, 56, Applicants assert that claims 2, 4, 6, 12, 16, 19-31, 33, 34, 37-40 and 41-56 are non-obvious. *See In re Fine*, 5 USPQ 2d 2596 (Fed. Cir. 1988).

Thus, in view of the amendments contained herein, Applicants respectfully request withdrawal of the § 103(a) obviousness rejection.

CONCLUSION

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 06-2375, under Order No. 10104789 from which the undersigned is authorized to draw.

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Respectfully submitted,

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